

Corridor-Based
Work Zone
Performance
Measures:
I-35, Central Texas

Work Zone Performance Management Peer Exchange Workshop

May 8, 2013 ◆ Atlanta, Georgia



#### **I-35 Construction Corridor**

- 17 sections
- 5+ years
- 90+ miles
- Up to 11 projects active at one time
- 55k -110k ADT
- ~ 66% through traffic
- > 75% trucks at night







### Vision for Traveler Information During Construction

- Provide information on <u>current</u> and <u>anticipated</u> travel conditions across multiple construction zones to assist:
  - Local residents
  - Regional travelers
  - Long-distance travelers
- Focus of system is on the construction-related impacts



# Key Construction-Related Traffic Issues

- Multiple contractors working independently
- Nighttime lane closures
  - Some create queues, some do not
  - Potential for several in same direction of travel per night
- Alternative routes are limited (Waco, Temple, Belton)



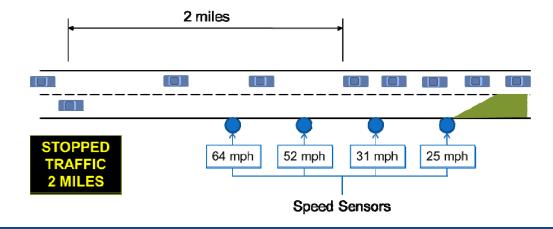




#### **I-35 Data Sources**

- Corridor lane closure database
- Traffic volumes
- Bluetooth travel time monitoring
- End-of-queue warning systems





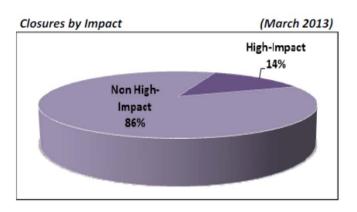


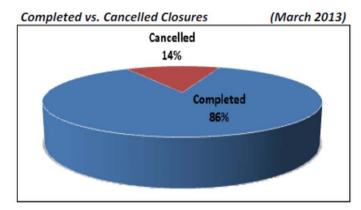
#### **I-35 Corridor Measures**

- Types of lane closures (full versus single lane)
- Advance notification times for lane closures
- Queues
  - % of lane closures causing quues
  - Maximum lengths
- Delays

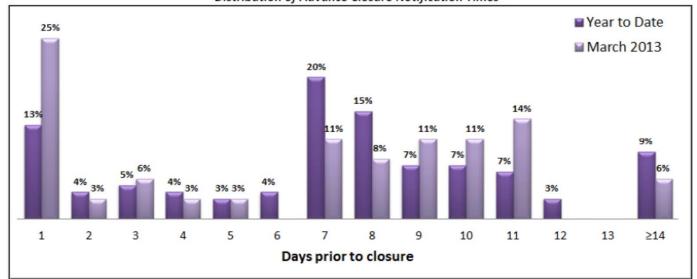


#### Lane Closure Types and Notification



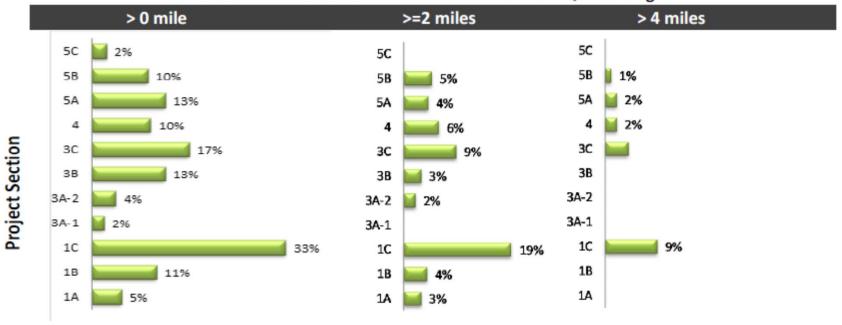


**Distribution of Advance Closure Notification Times** 

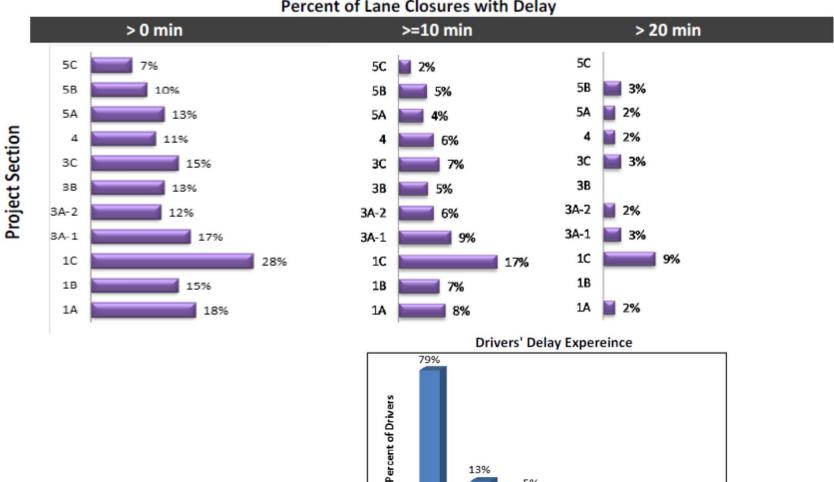


### I-35 Closure Impacts - Queues

#### Percent of Lane Closures with Maximum Predicted Queue Length



## I-35 Closure Impacts-Delays Percent of Lane Closures with Delay



13%

0-10

10-20

Delay (min)

2%

20-30

1%

30-60

0%

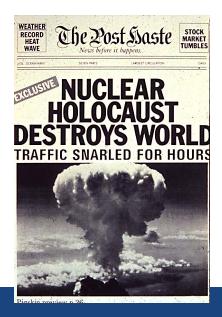
>60



#### **I-35 Corridor Impacts - Crashes**

- Project and corridor-level changes
- Tracked in near real-time
- Associate back to key work activities (i.e., nighttime freeway lane closures)







#### **Discussion Questions**

What other corridor-level measures would your agency be interested in?

What risks, if any, do you anticipate with possible misuse of these types of measures (from the media, political leaders, etc.)?

